

SATAKE

10/606,490

4,147,546
4,749,644
4,762,773
6175

priority (submitted) on 06/26/03 50
08/09/2002

What is claimed is:

1. A one-part photographic developing concentrate comprising:

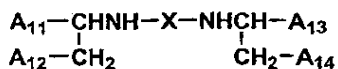
- (i) a paraphenylene diamine color developing agent; and
(ii) a water-soluble organic solvent,

wherein a molar ratio of sodium ion to potassium ion is at least 3, and a molar ratio of sulfate ion to carbonate ion is at least 0.25.

2. The one-part photographic developing concentrate of claim 1, wherein the developing concentrate does not comprise any other cations than sodium ion.

3. The one-part photographic developing concentrate of claim 1, wherein a compound represented by Formulas (A-I) to (A-IV) is further contained:

Formula (A-I)

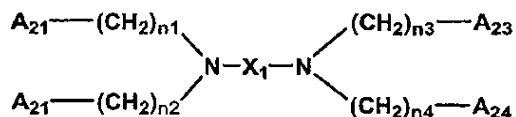


wherein A₁₁, A₁₂, A₁₃ and A₁₄, which may be the same or different, each represents -CH₂OH, -PO₃(M₆) or -COOM₇; M₆ and M₇ each represents a hydrogen atom, an ammonium group, an

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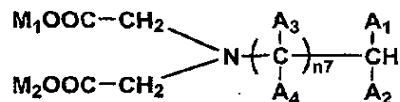
alkaline metal atom or an organic ammonium group; X represents an alkylene group having 2 to 6 carbon atoms or $-(B_1O)_n-B_2-$; n represents an integer of 1 to 6; and B_1 and B_2 , which may be the same or different, each represents an alkylene group having 1 to 5 carbon atoms,

Formula (A-II)



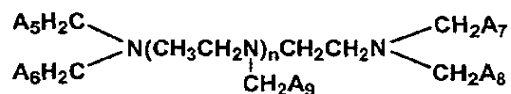
wherein A_{21} , A_{22} , A_{23} and A_{24} , which may be the same or different, each represents $-CH_2OH$, $-COOM^1$ or $-PO_3(M^2)_2$; M^1 and M^2 each represents a hydrogen atom, an ammonium group, an alkaline metal or an organic ammonium group; X_1 represents a straight or branched alkylene group having 2 to 6 carbon atoms, a saturated or unsaturated organic group which forms a ring, or $-(B_{11}O)_{n5}-B_{12}-$; $n5$ represents an integer of 1 - 6; B_{11} and B_{12} , which may be the same or different, each represents an alkylene group having 1 - 5 carbon atoms; and $n1$, $n2$, $n3$ and $n4$, which may be the same or different, each represents an integer of not less than 1 and at least one of $n1$, $n2$, $n3$ and $n4$ is 2 or more,

Formula (A-III)



wherein A_1 , A_2 , A_3 and A_4 , which may be the same or different, each represents a hydrogen atom, a hydroxyl group, $-\text{COOM}_3$, $-\text{PO}_3(\text{M}_4)_2$, $-\text{CH}_2\text{COOM}_5$, $-\text{CH}_2\text{OH}$ or a lower alkyl group, however, at least one of A_1 to A_4 represents $-\text{COOM}_3$, $-\text{PO}_3(\text{M}_4)_2$, or $-\text{COOM}_5$; M_1 , M_2 , M_3 , M_4 , and M_5 each represents a hydrogen atom, an ammonium group, an alkaline metal atom or an organic ammonium group; and $n7$ represents an integer of 0 to 2,

Formula (A-IV)



wherein, A_5 , A_6 , A_7 , A_8 and A_9 , which may be the same or different, each represents $-\text{COOM}_3$ or $-\text{PO}_3\text{M}_4\text{M}_5$; M_3 , M_4 and M_5 , which may be the same or different, each represents a hydrogen atom or an alkaline metal atom; and n represents an integer of 1 or 2.

4. The one-part photographic developing concentrate of claim 1, wherein the developing concentrate does not comprise a fluorescent whitening agent.

5. A method for processing a silver halide color photographic material, comprising the steps of:

imagewise irradiating the photographic material;

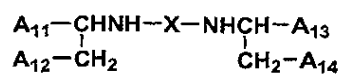
developing the irradiated photographic material in a developing solution which is prepared by diluting a volume of the developing concentrate of claim 1 with water having a volume of at least 3 times of the volume of the developing concentrate; and then

desilvering the developed photographic material.

6. The method for processing a silver halide color of photographic material of claim 5, wherein the developing solution is prepared by diluting the developing concentrate which does not comprise any other cations than sodium ion.

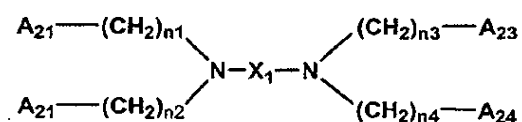
7. The method for processing a silver halide color of photographic material of claim 5, wherein the developing solution is prepared by diluting the developing concentrate containing a compound represented by Formulas (A-I) to (A-IV):

Formula (A-I)



wherein A_{11} , A_{12} , A_{13} and A_{14} , which may be the same or different, each represents $-\text{CH}_2\text{OH}$, $-\text{PO}_3(\text{M}_6)$ or $-\text{COOM}_7$; M_6 and M_7 each represents a hydrogen atom, an ammonium group, an alkaline metal atom or an organic ammonium group; X represents an alkylene group having 2 to 6 carbon atoms or $-(\text{B}_1\text{O})_n-\text{B}_2-$; n represents an integer of 1 to 6; and B_1 and B_2 , which may be the same or different, each represents an alkylene group having 1 to 5 carbon atoms,

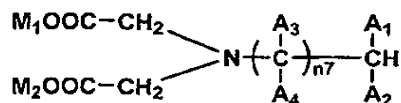
Formula (A-II)



wherein A_{21} , A_{22} , A_{23} and A_{24} , which may be the same or different, each represents $-\text{CH}_2\text{OH}$, $-\text{COOM}^1$ or $-\text{PO}_3(\text{M}^2)_2$; M^1 and M^2 each represents a hydrogen atom, an ammonium group, an alkaline metal or an organic ammonium group; X_1 represents a straight or branched alkylene group having 2 to 6 carbon atoms, a saturated or unsaturated organic group which forms a ring, or $-(\text{B}_{11}\text{O})_{n5}-\text{B}_{12}-$; $n5$ represents an integer of 1 - 6; B_{11} and B_{12} , which may be the same or different, each represents an alkylene group having 1 - 5 carbon atoms; and $n1$, $n2$, $n3$ and $n4$, which may be the same or different, each represents

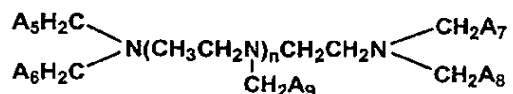
an integer of not less than 1 and at least one of n1, n2, n3 and n4 is 2 or more,

Formula (A-III)



wherein A₁, A₂, A₃ and A₄, which may be the same or different, each represents a hydrogen atom, a hydroxyl group, -COOM₃, -PO₃(M₄)₂, -CH₂COOM₅, -CH₂OH or a lower alkyl group, however, at least one of A₁ to A₄ represents -COOM₃, -PO₃(M₄)₂, or -COOM₅; M₁, M₂, M₃, M₄, and M₅ each represents a hydrogen atom, an ammonium group, an alkaline metal atom or an organic ammonium group; and n₇ represents an integer of 0 to 2,

Formula (A-IV)



wherein, A₅, A₆, A₇, A₈ and A₉, which may be the same or different, each represents -COOM₃ or -PO₃M₄M₅; M₃, M₄ and M₅, which may be the same or different, each represents a hydrogen atom or an alkaline metal atom; and n represents an integer of 1 or 2.

8. The method for processing a silver halide color of photographic material of claim 5, wherein the developing

solution is prepared by diluting the developing concentrate which does not comprise a fluorescent whitening agent.